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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,070	10/10/2001	Eric Martinez	8053.015.00	4677

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EXAMINER

LAVARIAS, ARNEL C

ART UNIT PAPER NUMBER

2872

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,070

Applicant(s)

MARTINEZ ET AL.

Examiner

Arnel C. Lavarias

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/15/04, 3/12/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendments to Claims 1, 6, and 25 in the submission dated 3/15/04 is acknowledged and accepted.

Response to Arguments

2. The Applicants' arguments, see in particular Pages 9-11 of the Applicants' remarks in the submission, filed 3/15/04, with respect to the rejections of Claims 1, 6, and 25 under 35 U.S.C. 102(e) by Beals et al. have been fully considered and are persuasive. The rejections of Claims 1-27 in Sections 3, 6-7 in the Office Action dated 10/15/03 have been withdrawn.
3. The Applicants argue that, with respect to newly amended Claim 1, Potash in view of DiGiovanni et al. fails to teach or reasonably suggest a service pipe that conveys gas between a gas main and a gas meter; a nipple, the nipple including a sidewall directly contacting an outer surface of the service pipe; a flexible tube disposed inside the service pipe and the nipple; a pressure fitting directly attached to the sidewall of the nipple, the pressure fitting sealing an end of the flexible tube to the nipple and providing access to an inside of the tube. The Examiner respectfully disagrees. The combined teachings of Potash in view of DiGiovanni et al. discloses a service pipe (See 10 in Figures 1a, 1b, 1c of Potash; 25 in Figure 1 of DiGiovanni et al.) that conveys gas (See Paragraph 0014 of Potash; col. 6, line 28-col. 7, line 9 of DiGiovanni et al.) between a gas main and a gas

meter (See 20 in Figure 1; col. 6, lines 28-51 of DiGiovanni et al.); a nipple (See 16, 18 in Figures 1a, 1b of Potash), the nipple including a sidewall directly contacting an outer surface of the service pipe (See 16, 18 in Figures 1a, 1b in Potash); a flexible tube disposed inside the service pipe and the nipple (See 24 in Figures 1a, 1b of Potash); a pressure fitting (See fittings at 20, 22 in Figures 1a, 1b of Potash) directly attached to the sidewall of the nipple, the pressure fitting sealing an end of the flexible tube to the nipple and providing access to an inside of the tube.

4. Claims 1-27 are rejected as follows.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6, 9, 11-13, 19-22, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potash (U.S. Patent Application Publication US2002/0114595 A1), of record, in view of DiGiovanni et al. (U.S. Patent No. 4427112), of record.

Potash discloses an apparatus and method for supplying network services over fiber optic cable to a particular building (See for example Figure 1a, 1b, 1c), the apparatus comprising a service pipe that conveys gas (See 10 in Figure 1a, 1b, 1c; Paragraph 0014); a nipple (See 16, 18 in Figures 1a, 1b), the nipple including a sidewall directly contacting an outer surface of the service pipe (See 16, 18 in Figures 1a, 1b); a flexible tubing

disposed inside the service pipe and the nipple (See 24 in Figure 1a, 1b, 1c); a pressure fitting (See fittings at 20, 22 in Figures 1a, 1b) directly attached to the sidewall of the nipple, the pressure fitting sealing an end of the flexible tube to the nipple and providing access to an inside of the tube (See 20, 22 in Figure 1a, 1b, 1c); and a fiber optic cable disposed inside the flexible tube (See 26 in Figure 1a, 1b, 1c), with each end of the fiber optic cable outside the service pipe. Potash additionally discloses the flexible tube and the pressure fitting not leaking at an operating gauge pressure for gas between the tube and an inside of the service pipe (See paragraph 0014-0016, 0032). Potash also discloses a first pressure fitting, at one end of the flexible tube, being at a first location convenient for connecting the fiber optic cable to the building, and a second pressure fitting, at a different end of the flexible tube, being at a second location convenient for connecting the fiber optic cable to a network cable (See Figures 1a, 1b, 1c; See 74, 58, 72, 50 of Figure 2).

Further, Potash discloses a method for pulling fiber optic cables through gas service pipes (See entire document, and in particular Figure 1, and Paragraph 0014), the method including stopping gas flow (See Paragraphs 0014, 0038); forming, at a first location convenient for connecting fiber optic cable to the particular building, a first hole within the service pipe (See Figures 1a-1c, 2); joining to the service pipe, at the first location, a first nipple that provides for a flexible tube a pass way between an inside of the service pipe and an outside of the service pipe, the first nipple including a first matching diameter pipe covering the first hole, wherein an inner diameter of the first matching diameter pipe is substantially equal to a diameter of the first hole (See for example 16, 20 in Figure 1a-

1b); forming, at a second location convenient for connecting fiber optic cable to a network cable, a second hole within the service pipe (See Figures 1a-1c, 2); joining to the service pipe, at the second location, a second nipple that provides for the flexible tube a pass way between the inside of the service pipe and the outside of the service pipe, the second nipple including a second matching diameter pipe covering the hole, wherein an inner diameter of the second matching diameter pipe is substantially equal to a diameter of the second hole (See for example 18, 22 in Figure 1a-1b); feeding the flexible tube through a catch nipple, wherein the catch nipple includes one of the first nipple and the second nipple, after passing the flexible tube through one of the first and second nipples different from the catch nipple of the first nipple and the second nipple and through the inside of the service pipe, wherein the feeding includes feeding the flexible tube through the entire length of the matching diameter pipe of the catch nipple (See 16, 20 or 18, 22 in Figures 1a-1b); sealing the flexible tube to the first nipple and the second nipple for pressures up to a predetermined maximum pressure (See 20, 22 in Figures 1a-1c; Paragraphs 0031-0033); and feeding a fiber optic cable through the flexible tube (See 26 in Figures 1a-1c). Additionally, Potash discloses cutting an opening into the service pipe, the opening sufficient for reaching the flexible tube inside the service pipe and manipulating the flexible tube into the catch nipple (See 16, 18 in Figures 1a-1b; 20, 22 in Figure 1c; Paragraph 0031); restoring the gas flow into the service pipe after sealing the flexible tube, and sealing to the service pipe a component, such as a catch nipple (See 16, 20, 18, 22 in Figures 1a-1b; Paragraphs 0031-0033, 0038), that covers the opening for pressures up to a predetermined maximum pressure; the component that covers the

opening including a fitting (See 20, 22 in Figure 1a-1b); either of the nipples being the catch nipple (See 16, 20, 18, 22 in Figures 1a-1b); joining the first or second nipple is performed after cutting the opening and feeding the flexible tube through the catch nipple (See Paragraphs 0031-0033, 0038-0040); joining the first or second nipple further comprises covering the opening with a component including the catch nipple (See 16, 20, 18, 22 in Figures 1a-1b); and sealing the component to the service pipe for pressures up to the predetermined maximum pressure (See Paragraph 0031-0033, 0038).

Potash lacks the service pipe conveying gas between a gas main and a gas meter for a particular building. It is extremely well known to have a service pipe convey gas between a gas main and a gas meter. For example, DiGiovanni et al. teaches a typical or conventional gas distribution network (See for example Figure 1; col. 6, line 28-col. 7, line 9) with a service line connection (See for example 25 in Figure 1) that conveys gas from a gas main (See for example 20 in Figure 1), through a gas meter (See for example col. 6, lines 28-51), and to a building (See for example 26, 27, 28 in Figure 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the service pipe of Potash convey gas between a gas main and a gas meter for a particular building, as taught by DiGiovanni et al., for the purpose of providing gas service to commercial and residential customers, as well as determine the amount of gas usage from these customers.

7. Claims 5, 7-8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Potash in view of DiGiovanni et al. as applied to Claims 1, 6, 25 above, and further in view of Beals et al. (U.S. Patent Application Publication US2002/0040731 A1), of record.

Potash in view of DiGiovanni et al. discloses the invention as set forth above in Claims 1, 6, 25, except for the diameter of the service pipe being less than about 6 inches. However, it is well known in the art to supply gas flow utilizing gas service piping having a diameter of 6 inches or less. For example, Beals et al. teaches an apparatus and method (See for example Figures 2-3, 5-7, 20-21) for supplying network services over optical fiber located within gas service piping of diameter of 6 inches or less (See paragraph 0053). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the gas service pipe have a diameter of about 6 inches or less, as taught by Beals et al., in the apparatus of Potash in view of DiGiovanni et al., to conform to existing gas service piping standards and practices.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Potash in view of DiGiovanni et al.

Potash in view of DiGiovanni et al. discloses the invention as set forth above in Claims 1, 6, and 25, except for the step of evacuating gas from the service pipe after the step of stopping the gas flow and before the step of joining the first nipple and joining the second nipple. However, it would have been obvious to one skilled in the art to evacuate the service pipe of gas, water, fluid, etc., after shutting the flow and prior to joining the nipples onto the service pipe to reduce spillage and reduce the amount of toxic/harmful material released into the environment.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Potash in view of DiGiovanni et al. as applied to Claims 1, 6, and 25 above, and further in view of Beals et al.

Potash in view of DiGiovanni et al. discloses the invention as set forth above in Claims 1, 6, and 25, except for the component that covers the opening including two couples. However, Beals et al. teaches a method for pulling fiber optic cables through gas service pipes (See entire document, and in particular Figures 2-3, 5-7, 20-21, and paragraph 0048-0120), wherein a component that covers the opening made into the gas service pipe includes a fitting and two couples (See 202 and couples surrounding hot-tap gate valve below 104 in Figure 7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the method of Potash in view of DiGiovanni et al. to have the component that covers the opening include two couples, as taught by Beals et al., for the purpose of providing additional means for adapting other attachments onto the service pipe, while preventing leakage of the gas flow into the environment.

10. Claims 15-17, 23-24, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potash in view of DiGiovanni et al.

With regard to Claim 15, Potash in view of DiGiovanni et al. disclose the invention as set forth above in Claims 1, 6, 25. Potash in view of DiGiovanni et al. is silent regarding the predetermined pressure being in the range from about 75 psig to about 100 psig. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the predetermined pressure being in the range from about 75 psig to about 100 psig, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to have the predetermined

pressure being in the range from about 75 psig to about 100 psig for the purpose of reducing the risk of rupturing the gas service pipe or collapsing the flexible tube. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235.

With regard to Claims 16-17, Potash in view of DiGiovanni et al. discloses the invention as set forth in Claims 1, 6, 25, except for feeding or replacing a fiber optic cable passing through the flexible tube after the step of restoring the gas flow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to feed or replace a fiber optic cable passing through the flexible tube after the step of restoring the gas flow, since one skilled in the art would have realized that the interior of the flexible tube is isolated from the gas flow from the interior of the service pipe, and installing or replacing an existing fiber optic cable in the flexible tube may be performed whether the gas flow in the service pipe is on or off. One would have been motivated to do this to reduce the installation time required for the fiber optic cable.

With regard to Claims 23-24, Potash in view of DiGiovanni et al. discloses the invention as set forth above in Claims 1, 6, 25, except for accessing the first or second location without cutting into a roadway that is used for the passage of motor vehicles. It would have been obvious to one having ordinary skill in the art at the time the invention was made to access the first or second location without cutting into a roadway that is used for the passage of motor vehicles, since one skilled in the art would choose the first and second locations on the service pipe based on ease of accessibility, cost, closeness of each location to the intended service/customer, and other such variables. One would have been motivated to access the first or second location without cutting into a roadway that

is used for the passage of motor vehicles to reduce cost and reduce the impact of fiber optic cable installation on the general public/populace at the two locations.

With respect to Claims 26-27, Potash in view of DiGiovanni et al. discloses the invention as set forth above in Claims 1, 6, and 25, except for obtaining rights for sealing the flexible tube in the service pipe and charging users of the equipment in the building for transferring data over the fiber optic cable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to obtain rights for sealing the flexible tube in the service pipe and charge users of the equipment in the building for transferring data over the fiber optic cable since one skilled in the art would recognize the general requirement of obtaining rights from the owner of property prior to performing any action on the property, as well as recognize that income from operating a fiber optic communication link is generally based on charging customers based on access and usage of the link. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to obtain rights for sealing the flexible tube in the service pipe and charge users of the equipment in the building for transferring data over the fiber optic cable. One would have been motivated to do this to avoid costly delays in fiber optic cable installations, as well as generate income so that general maintenance and future improvements to the network services can be performed.

11. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Potash in view of DiGiovanni et al. as applied to Claims 1, 6, and 25 above, and further in view of Klamim et al. (U.S. Patent No. 4756510), of record.

Potash in view of DiGiovanni et al. discloses the invention as set forth above in Claims 1, 6, 25 above, except for the step of cutting further comprising removing a longitudinal portion of the service pipe. However, Klamm et al. teaches installing fiber optic cables in fluid transmission pipelines wherein the pipeline is cut longitudinally to gain access to the interior of the pipeline for retrieving and placing objects such as tubes. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the step of cutting further comprising removing a longitudinal portion of the service pipe, as taught by Klamm et al. in the method for pulling fiber optic cables through gas service pipelines as disclosed by Potash in view of DiGiovanni et al. One would have been motivated to do this to provide full and unobstructed access to the interior of the pipeline.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

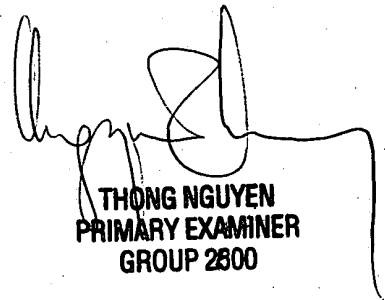
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 8:30 AM - 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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5/26/04



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